

In the Claims:

1. (currently amended) A switch circuit for regulating the substrate potential of an integrated circuit comprising:

a switch:

a first input for controlling said switch coupled to a first N-well bias supply line;

a second input for controlling said switch coupled to a substrate bias supply line;

a first switched switching terminal of said switch coupled to a ground;

~~a second switched terminal of said switch coupled to said substrate bias supply line; and~~

an output terminal of said switch coupled to a P-type substrate, wherein said switch is operable to selectively couple said second input to said output terminal responsive to a voltage of said substrate bias supply line.

2. (original) The switch circuit of Claim 1, wherein said switch is operable to electrically couple said P-type substrate to said ground when a bias voltage is present on said first N-well bias supply line.

3. (original) The switch circuit of Claim 1, wherein said switch is operable to electrically couple said P-type substrate to said substrate bias

supply line when a substrate bias voltage is present on said substrate bias supply line.

4. (currently amended) The switch circuit of Claim 1, further comprising a third input for controlling said switch coupled to a second N-well bias supply line.

5. (original) The switch circuit of Claim 4, wherein said switch is operable to electrically couple said P-type substrate to said ground when a bias voltage is present on said second N-well bias supply line.

6. (original) The switch circuit of Claim 4, wherein said switch is operable to electrically couple said P-type substrate to said substrate bias supply line when a substrate bias voltage is present on said substrate bias supply line.

7. (original) The switch circuit of Claim 1, wherein said switch is operable to electrically couple said P-type substrate to said substrate bias supply line when a substrate bias voltage is present on said substrate bias supply line and there is no bias voltage present on said N-well bias line.

8. (original) The ~~switch~~ circuit of Claim 1, wherein said switch is operable to electrically couple said P-type substrate to said ground when a substrate bias voltage is present on said substrate bias supply line and there is no bias voltage present on said N-well bias line.

Claims 9-20 (canceled) (various restrictions)

21. (new) A circuit for regulating the substrate potential of an integrated circuit comprising:

switch means;

a first input for controlling said switch means coupled to a first N-well bias supply line;

a second input for controlling said switch means coupled to a substrate bias supply line;

a first switching terminal means of said switch means coupled to a ground; and

an output terminal means of said switch means coupled to a P-type substrate, wherein said switch means is operable to selectively couple said second input to said output terminal means responsive to a voltage of said substrate bias supply line.

22. (new) The circuit of Claim 21, wherein said switch means is operable to electrically couple said P-type substrate to said ground when a bias voltage is present on said first N-well bias supply line.

23. (new) The circuit of Claim 21, wherein said switch means is operable to electrically couple said P-type substrate to said substrate bias supply line when a substrate bias voltage is present on said substrate bias supply line.

24. (new) The circuit of Claim 21, further comprising a third input for controlling said switch means coupled to a second N-well bias supply line.

25. (new) The circuit of Claim 24, wherein said switch means is operable to electrically couple said P-type substrate to said ground when a bias voltage is present on said second N-well bias supply line.

26. (new) The circuit of Claim 24, wherein said switch means is operable to electrically couple said P-type substrate to said substrate bias supply line when a substrate bias voltage is present on said substrate bias supply line.

27. (new) The circuit of Claim 21, wherein said switch means is operable to electrically couple said P-type substrate to said substrate bias supply line when a substrate bias voltage is present on said substrate bias supply line and there is no bias voltage present on said N-well bias line.

28. (new) The circuit of Claim 21, wherein said switch means is operable to electrically couple said P-type substrate to said ground when a substrate bias voltage is present on said substrate bias supply line and there is no bias voltage present on said N-well bias line.